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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/697,198	10/26/2000	Parviz Tayebati	CORE-61	4834

7590 02/24/2003

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EXAMINER

LANDAU, MATTHEW C

ART UNIT	PAPER NUMBER
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2815

DATE MAILED: 02/24/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/697,198

Applicant(s)

TAYEBATI, PARVIZ

Examiner

Matthew Landau

Art Unit

2815

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 October 0200 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### *Drawings*

1. Figures 1 and 2 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

### *Claim Rejections - 35 USC § 102*

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1, 2, 5, and 6 are rejected under 35 U.S.C. 102(e) as being anticipated by Munks et al. (US Pat. 6,289,028, hereinafter Munks).

In regards to claim 1, Figure 1 of Munks discloses a wavelength stabilizing apparatus comprising: a wavelength measuring module 18 for detecting a difference between an instantaneous wavelength of the laser 12 and the target wavelength (column 6, lines 4-7), and for generating an output signal 22 which is representative of the difference; and a control unit 24 for

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receiving said output signal 22 from said wavelength measuring module 18 and for modifying the electrooptical performance of a gain medium of the tunable laser in accordance with said output signal 22 so as to lock the tunable laser 12 to its target frequency (see column 6, lines 7-15).

In regards to claim 2, Figure 1 of Munks discloses a wavelength stabilizing apparatus wherein the tunable laser 12 is an electrically pumped laser, and further wherein said control unit 24 is adapted to adjust an injection current applied to the gain medium of the tunable laser so as to modify the electrooptical performance of the gain medium of the tunable laser (see column 6, lines 13-15).

In regards to claim 5, Figure 1 of Munks discloses a laser system comprising; a tunable laser 12 and a wavelength stabilizing apparatus comprising: a wavelength measuring module 18 for detecting a difference between an instantaneous wavelength of the laser 12 and the target wavelength (column 7, lines 4-7), and for generating an output signal 22 which is representative of the difference; and a control unit 24 for receiving said output signal 51 from said wavelength measuring module 18 and for modifying the electrooptical performance of a gain medium of the tunable laser in accordance with said output signal 22 so as to lock the tunable laser to its target frequency (see column 6, lines 7-15).

In regards to claim 6, Munks discloses a method for stabilizing the wavelength of a tunable laser 12 to a target frequency, said method comprising: detecting a difference between an instantaneous wavelength of the laser and a target wavelength, and generating an output signal 22 which is representative of the difference; and modifying electrooptical performance of a gain

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medium of the tunable laser in accordance with said output signal so as to lock the tunable laser to its target frequency (see column 6, lines 4-15).

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claims 3 and 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Munks in view of Mooradian and in further view of Camparo et al.

In regards to claim 3, the difference between Munks and the claimed invention is the tunable laser being optically pumped, wherein the control unit is adapted to adjust the intensity of the pump laser applied to the gain medium of the tunable laser. Figure 11 of Mooradian discloses an optically pumped laser 30. Figure 1 of Camparo et al. discloses a pump laser 12, wherein a controller 36 supplies a control signal to the pump laser 12 to adjust the intensity of the pump laser. In view of such teaching, it would have been obvious to the ordinary artisan at the time the invention was made to modify the invention of Munks by using an optically pumped tunable laser, wherein the control unit is adapted to adjust the intensity of the pump laser applied to the laser's gain medium. The ordinary artisan would have been motivated to modify Munks in the manner described above for the purpose of electrically isolating the tunable laser from the control circuit.

In regards to claim 4, a further difference between Munks and the claimed invention is an electrically pumped pump laser wherein the control unit is adapted to adjust an injection current applied to a gain medium of the pump laser. Figure 11 of Mooradian discloses an electrically pumped pump laser 38. Figure 1 of Camparo et al. discloses a pump laser 12, wherein a controller 36 supplies a control signal to the pump laser 12 to adjust the injection current applied to the gain medium of the pump laser. In view of such teaching, it would have been obvious to the ordinary artisan at the time the invention was made to further modify the invention of Munks by incorporating an electrically pumped pump laser with the control unit adjusting the injection current of the pump laser. The ordinary artisan would have been motivated to modify Munks in the manner described above for the purpose of providing a simple pump laser that is easily controlled.

### ***Response to Arguments***

6. Applicant's arguments filed December 16, 2002 have been fully considered but they are not persuasive.

In response to Applicant's arguments that Figures 1 and 2 of the instant application are not prior, it is unclear why Applicant takes this position. The figures are discussed in the Background section when discussing Patent Applications 09/105,399 and 09/543,318, both of which have earlier filing dates and different inventive entities from that of the instant application. Therefore, Figures 1 and 2 are prior and should be labeled accordingly.

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In response to Applicant's arguments regarding claims 1-5, it is noted that rejection was based on Munks (US Pat. 6,289,028), not Leard et al. Therefore, Applicant's arguments are moot.

Applicant's arguments in regards to claim 6 are moot in light of the new grounds of rejection.


***Conclusion***

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Matthew C. Landau whose telephone number is (703) 305-4396.

The examiner can normally be reached on 8:00 AM-4: 30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eddie Lee can be reached on (703) 308-1690. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308-7722 for regular communications and (703) 308-7722 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

  
**EDDIE LEE**  
**SUPERVISORY PATENT EXAMINER**  
**TECHNOLOGY CENTER 2800**

Matthew C. Landau

Examiner

February 15, 2003